### **SWP Water Quality Summary**

January 10 to February 8, 2011

**Electrical Conductivity:** EC increased at Harvey O. Banks Pumping Plant (HBP) and Barker Slough, but decreased at Check 29, Check 41, Devil Canyon  $2^{nd}$  Afterbay and Vallecitos. Concentrations ranged from 225 uS/cm to  $607\mu$ S/cm (135 mg/L to 364 mg/L), below the Article 19 Monthly Average Objective of 440 mg/L (733 μS/cm). At the end of the month, the highest concentration of  $607 \mu$ S/cm (364 mg/L) occurred at Barker Slough, while the lowest concentration of 225 μS/cm (135 mg/L) occurred at Devil Canyon  $2^{nd}$  Afterbay. The 30-day average concentration at Harvey O. Banks Pumping Plant (HBP) was  $264 \mu$ S/cm (158 mg/L).

**Bromide\*:** Concentrations exceeded the California Bay-Delta Authority (CBDA) Objective of 0.05 mg/L at all locations. Concentrations ranged from 0.06 mg/L to 0.33 mg/L. At the end of the month, Barker Slough had the highest concentration of 0.33 mg/L, while the lowest concentration of 0.06 mg/L occurred at Devil Canyon 2<sup>nd</sup> Afterbay.

\* Bromide concentrations are calculated values using linear regression equations using EC concentrations and are not as accurate as bromide concentrations from laboratory analysis.

**Turbidity:** Turbidity levels increased at HBP, Devil Canyon 2<sup>nd</sup> Afterbay, Barker Slough, and Vallecitos, but decreased at Check 29 and Check 41. Turbidity ranged from 1.7 NTU to 68.7 NTU. At the end of the month, the lowest level of 4.5 NTU occurred at Devil Canyon 2<sup>nd</sup> Afterbay, while the highest level of 68.7 NTU occurred at HBP. The 30-day average turbidity level at HBP was 21.6 NTU with a 166% change.

**Dissolved Organic Carbon (DOC):** Concentrations decreased from 5.5 to 4.6 mg/L at HBP and from 4.5 to 3.7 mg/L at Check 13, but increased from 4.4 to 4.9 mg/L at Edmonston. The DOC 30-day average concentration at HBP was 5.2 mg/L.

**Taste and Odor Compounds:** MIB and geosmin concentrations in the SWP ranged from non-detect to 4 ng/L at Clifton Court Inlet, HBP, Del Valle Check 7, O'Neill Forebay Outlet (Check 13).

There was no groundwater pumped into the California Aqueduct this month.

#### Note:

The intent of the monthly water quality (WQ) summary is to acquaint state water contractors, scientists and interested parties with the status of water quality in the State Water Project (SWP). Your comments, questions and suggestions are welcome and should be directed to Cindy Garcia at 916-653-7213, or Austine Eke at 916-653-7227. To view WQ data from the automated stations along the SWP, visit: <a href="http://www.water.ca.gov/swp/waterquality/AutostationData/Autostation\_map.cfm">http://www.water.ca.gov/swp/waterquality/AutostationData/Autostation\_map.cfm</a>, and click on a station name on the map to link to the station's data on the California Data Exchange Center (CDEC) website.

To view the Edmonston daily AF pumping data, visit: <a href="www.water.ca.gov">www.water.ca.gov</a>. Click on the "State Water Project" tab, and click on the "Operations Control" link. Look under the "Project-Wide Operations" header for the "Dispatcher's Daily Water Report."

# **SWP Water Quality Report**

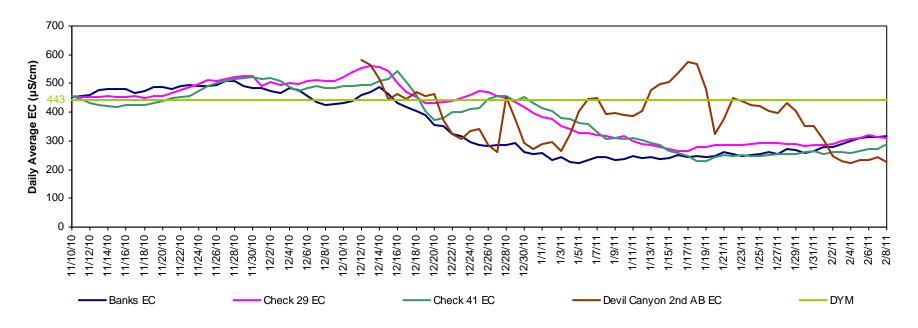
## DWR Operations & Maintenance Water Quality Automated Station Data from January 10 to February 8, 2011.

Automated sampling stations provide real time data by continuously measuring water quality conditions in the California Aqueduct.

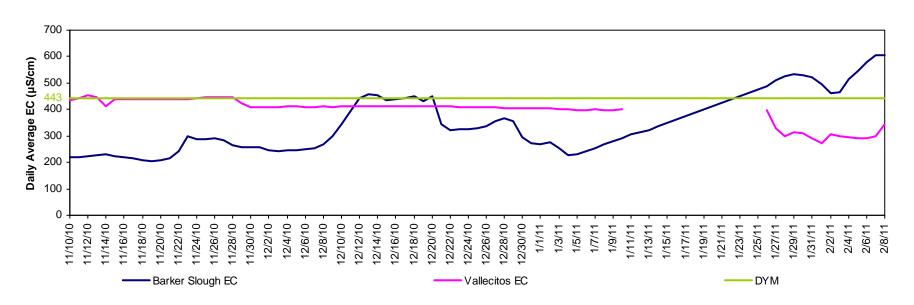
Water Quality Parameters	Objective	Range	Harvey O. Banks PP KA000331	Check 29 KA024454	Check 41 KA030341	Devil Canyon 2-Afterbay KA041288	NBA at Barker Slough KG000000	Vallecitos KB002250	Check 13 O'Neill Forebay Outlet KA007089	Edmonston PP KA0029345
EC (µS/cm)	733**	1/10/2011	237	315	308	389	291	400		
		2/08/2011	314	312	288	225	607	350		
		% change	32	-1	-7	-42	109	-13		
		30-day Avg.	264	291	263	384	452	317		
Bromide (mg/L)	0.05*	1/10/2011	0.07	0.11	0.10	0.15	0.10	0.16		
		2/08/2011	0.11	0.11	0.09	0.06	0.33	0.13		
		% change	57	0	-10	-60	230	-18.7		
		30-day Avg.	0.08	0.09	0.08	0.16	0.20	0.11		
Turbidity (NTU)		1/10/2011	25.8	11.1	20.3	1.7	53.3	7.2		
		2/08/2011	68.7	7.2	13.6	4.5	53.7	9.2		
		% change	166	-35	-33	165	1	28		
		30-day Avg.	21.6	12.6	25.8	3.0	46.0	10.0		
DOC (mg/L)	3.0*	1/10/2011	5.5						4.5	4.4
		2/08/2011	4.6						3.7	4.9
		% change	-16						-18	11
		30-day Avg.	5.2						4.0	5.3
		Clifton	Harvey O.	Lake Del	Check 13 O'Neill Forebay					
Taste & Odor		Court	Banks PP	Valle, Check 7		Check 41	Check 66	Castaic		Silverwood
Parameters	Range	KA000000	KA000331	KB001632	KA007089	KA030341	KA040341	Lake	Lake Perris	Lake
MIB (ng/L)	1/10/2011	ND	ND	ND	ND	ND – 1	1	ND	ND	1
Geosmin (ng/L)	2/08/2011	2	2 - 3	3	3	2 - 3	4	ND	ND	4

<sup>\*</sup>CBDA Objective; \*\*Article 19 Monthly Average (converted from 440 mg/L to 733µS/cm); ND = Non-detect.

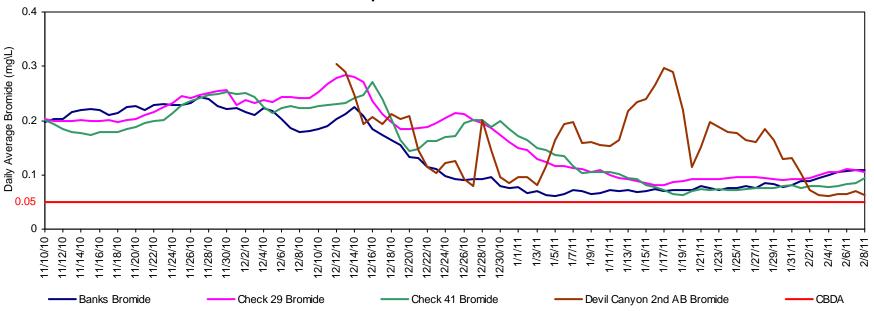
#### **California Aqueduct - Electrical Conductivity**



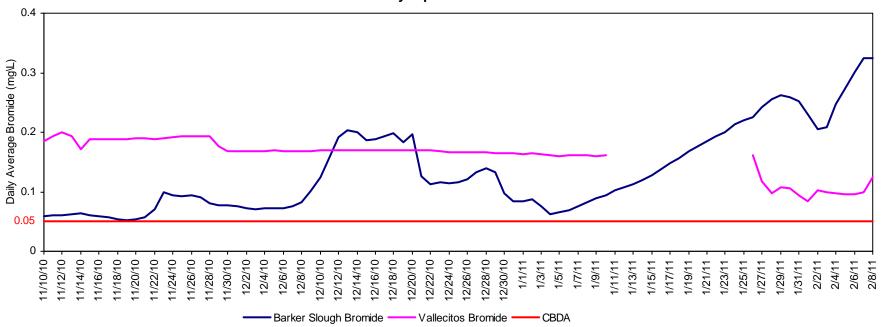
## North and South Bay Aqueduct - Electrical Conductivity



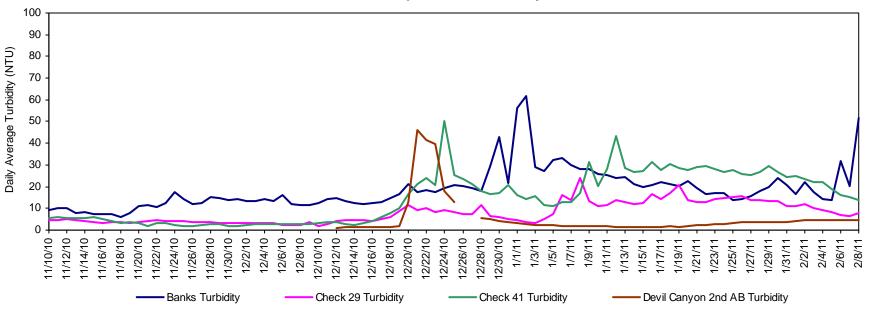
#### **California Aqueduct - Calculated Bromide**



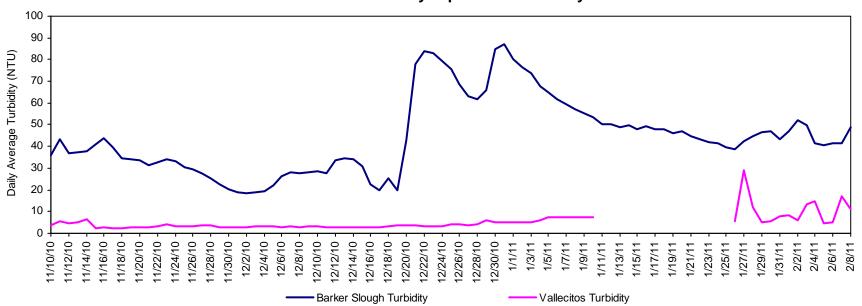
#### North and South Bay Aqueduct - Calculated Bromide



#### **California Aqueduct - Turbidity**



#### **North and South Bay Aqueduct - Turbidity**



# California Aqueduct Calculated Dissolved Organic Carbon

